

>> The Problem

Forces face a significant threat from insurgents employing a variety of tactics. Insurgents are becoming more aggressive with attacks against fixed sites. Attacks are complex and executed on multiple avenues of approach using a combination of weapons and tactics. The lack of a perimeter sensor and the ability to command and control prior to and during attacks and to allow reaction forces to respond to decisions based on sensor feeds are possible issues contributing to this situation.

>> Protection Model

**SEE FIRST - UNDERSTAND FIRST - ACT FIRST
FINISH DECISIVELY**



Provide an integrated, multi-layered 360 degree real-time, hemispherical capability to detect, assess/predict, decide, act (proactive & reactive), recover against air, ground, CBRNE threats at fixed sites.

>> Fixed Site Protection Capability Needs

Battle Command

- Integrated networked battle command system with an integrated common operating picture (COP). COP will include blue forces, threats and hazards, control measures, geometry of graphics/overlays, and assets available.
- Integrated intelligence, surveillance and reconnaissance (ISR) capabilities to include long-range acoustic, thermal, visual and seismic sensors both manned and unmanned.
- Ability of a commander to "fight" the systems
- Ability to conduct predictive analyses and staff planning functions

Ground/Direct Fire

- Scaleable and integrated perimeter protection measures against ground threats.
- Positively differentiate, identify, and mark hostile forces under all conditions.
- Locate and bring accurate fires or direct ground forces against snipers and level 1 threats.
- Protect personnel and critical infrastructure against the effects of direct fires (RPG and 12.5mm and below).

Indirect Fire/Air

- Detect incoming rockets, artillery, and mortars (RAM) fire and quickly warn personnel in danger.
- Identify, intercept, and neutralize hostile RAM fire.
- Track the incoming RAM fire to determine the location of the hostile firing unit and bring accurate and lethal counter-battery fire.
- Protect critical infrastructure from the effects of all incoming RAM fires.

Chemical, Biological, Radiological, Nuclear (CBRN)

- Standoff detection of Chemical, Biological, Radiological, Nuclear (CBRN)/Toxic Industrial Materials (TIM) vapors and hazards from safe distances.
- Point detection, identification and quantification of CBRN/TIM contamination at low-levels.
- Rapid and accurate sharing of CBRN information and warning soldiers of imminent hazards.
- Protect critical infrastructure and occupants from CBRN contamination.
- Perform equipment, facility and mass personnel decontamination.

Intrusions, Physical Security, Civil Military, Environmental

- Prevent unauthorized intrusions into fixed sites by personnel or vehicles.
- Non-lethal capability to prevent unnecessary escalation of violence.
- Protect critical infrastructure against any physical security threat including sabotage and theft.
- Communicate with, contain and protect the civilian populace.
- Detect sub-surface activities